Wilfrid Sellars on Truth

Between Immanence and Transcendence

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3 Learning from others

In this chapter, I want to explore some possible responses to the concerns raised at the end of the preceding chapter. The chapter will first look at how other authors have defended Sellars's concept of ideal truth. I will begin by discussing Jay Rosenberg's and Johanna Seibt's proposals (Rosenberg 1975 and others; Seibt 1990 and others). These stem from a time when Rorty's criticism might have been more directly felt on the philosophical scene than it is today. Both approaches try to show that we can establish convergence between conceptual schemes "from within," i.e., from an immanent point of view. Thus, they want to offer an alternative to Rorty's second assumption.

A different, more recent proposal comes from Luz C. Seiberth (Seiberth 2022). In contrast to Seibt and Rosenberg, Seiberth does not primarily target Rorty's second assumption but the first. He argues that Sellars did not try to establish that we can neutrally assess whether our conceptual schemes converge. Seiberth further maintains that we need not presuppose the possibility of such assessment for Sellars's claims about ideal truth to be defensible. While I am sympathetic toward Seiberth's general approach, I will argue that we need an even more modest reading of Sellars.

The second and third parts of this chapter discuss two concepts often invoked to make Sellars's notion of ideal truth intelligible: ideally adequate picturing and successful action. I challenge the idea that the notion of successful action can be employed to construct a further limit concept through which we could grasp the concept of ideal truth without already understanding the concept of an ultimate conceptual scheme. The third part of the chapter argues that the idea that the concept of ideally adequate picturing can be used to make the concept of ideal truth intelligible seems to have been only of marginal importance in Sellars's thinking.

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3.1 Existing approaches

Convergence: Rosenberg and Seibt

I will begin with a discussion of Jay Rosenberg, who has examined the Sellarsian concept of ideal truth more closely than anybody else, and of Johanna Seibt (1990), who, while critical of Rosenberg, applies the same general strategy. Both agree that there is no neutral viewpoint "outside" our conceptual schemes from which we could establish that our conceptual schemes converge toward an ideal limit. Their basic strategy is to argue that we can establish such convergence "from within" our conceptual schemes, i.e., from the immanent, non-neutral standpoint we find ourselves in.

Seibt and Rosenberg thus both target the second assumption, which Rorty ascribes to Sellars. According to it, we can establish whether our conceptual schemes approximate an ultimate scheme if we can neutrally assess how adequately these conceptual schemes picture the world. The assumption presents neutral assessment of pictorial adequacy merely as a sufficient condition for establishing convergence. Seibt and Rosenberg agree with Rorty that this condition cannot be met if "neutral" is understood to imply a standpoint for assessment which "lies outside" our conceptual schemes, i.e., is independent of them. However, Seibt and Rosenberg try to offer ways of establishing convergence from within our conceptual schemes. Sellars himself never discusses convergence,[1] but debates about convergence loomed large in philosophy of science in the last third of the 20th century. Rosenberg's and Seibt's proposals must be located in the context of these discussions about convergent realism, the pessimistic meta-induction,[2] and related questions.

Rosenberg writes not so much from an exegetical perspective but from a broadly conceived Sellarsian position. His aim is to defend the Peircean–Sellarsian idea that the concepts of ideal truth and reality can be understood through the notion of an imagined ideal limit of scientific inquiry.

At least in his earlier texts, Rosenberg seems to think that Sellars wants to employ the concept of picturing to assess conceptual frameworks neutrally. He writes:

> Sellars' requirement, that the adequacy of the semantical rules themselves ultimately be measured by the adequacy as *pictures* of the first-level assertions which they license, suggests that we need a standpoint which is *neutral* among diverse conceptual structures from which we can judge the degree of fit between a system of natural-linguistic objects and a system of non-linguistic objects in a way which does not *presuppose* that one conceptual framework is more adequate than another.
>
> (Rosenberg 1975, §42; Rosenberg's emphases)

Like Rorty, however, Rosenberg claims already in his first writings on the topic that picturing cannot give us an accessible neutral measure of such adequacy:

> proto-correlational [pictorial] isomorphism is the *outcome* of the evolution of representational systems, but cannot be the *grounds* upon which a choice among representational systems is predicated.
>
> (Rosenberg 1974, 121; Rosenberg's emphases)

Increased pictorial adequacy is thus a product of rational conceptual change, but rational conceptual change is driven by other considerations. Some years later, Rosenberg embraces what seems like a natural consequence of this claim and sets picturing aside completely in his account of ideal truth:

> We may, of course, say of it [the ideal conceptual scheme] that it would be a representational system which is ideally adequate to the world which it represents, which it corresponds to or fits the world, or which pictures the world (absolutely) correctly, but such characterizations would, in an important sense, be idle.
>
> (Rosenberg 1980, 186)

Rosenberg claims that we do not accept new conceptual schemes because of their better picturing. We accept them because we can justify the change based on standards or values internal to our conceptual systems. Claims to the effect that a newly adopted conceptual scheme pictures the world more adequately than an abandoned scheme are trivially true. We make such claims in the light of the framework in which we currently operate, i.e., in this case, in the light of a newly adopted framework.[3] For Rosenberg, to say that a conceptual framework pictures the world more adequately than a predecessor is just to say that the transition from one to the other was justified because it resolved an inconsistency or filled an explanatory gap in our former conceptual scheme (or overcame a "breakdown" of the former scheme, as Rosenberg calls it).

From this perspective, the assertion that an ultimately justified scheme would picture the world in an ideally adequate way is not informative. Since the ultimate, Peircean conceptual scheme is a gold-standard conceptual scheme, the correct pictures generated by the scheme are themselves gold-standard pictures. But that does not tell us anything informative about what distinguishes this gold-standard conceptual scheme from "lesser" schemes.

Let us look at how Rosenberg tries to develop a Sellarsian notion of ideal truth without appealing to the possibility of assessing the adequacy

of our conceptual schemes or theories from a standpoint independent of these schemes.[4] According to Rosenberg, we need neither such a neutral standpoint nor picturing to determine whether our conceptual schemes converge. Rather, we can establish convergence differently, and justified conceptual change itself guarantees convergence. We can retrospectively justify conceptual change as warranted if we can establish that a successor conceptual scheme has greater explanatory power than its predecessor (Rosenberg 1980, chap. VIII).

The notion of greater explanatory power has a qualitative and a quantitative dimension. From the qualitative viewpoint, a justified successor conceptual scheme must be able to explain why its predecessor provided some successful explanations and failed to provide explanations in other cases (Rosenberg 1975, §54). This qualitative requirement is realized by reconstructing the laws accepted in the predecessor scheme through the conceptual tools of the successor scheme, i.e., by constructing a "nomological isomorph" of the old scheme with the means of the new scheme (Rosenberg 1988). According to Rosenberg, a new theory or conceptual scheme will typically be distinguished from a predecessor merely by some numerical correction factor, such that the cases which the older theory explained successfully are limiting cases of the broader range of cases that the new theory can explain.[5] In this way, we can appreciate why an older theory was as successful as it was through the lens of the new theory.

Quantitatively, growing explanatory power is reflected in a convergence in the numerical values of the predictions made by successive theories. According to Rosenberg, this gives us a means of capturing what "limit" means with respect to conceptual change. He tries to establish convergence from within by showing that rational conceptual change, i.e., conceptual change within the constraints of his qualitative criterion, necessarily leads to ever-diminishing *differences* between successively predicted theoretical values. Even if we cannot define a limit "from without" ("Weierstrass convergence"), the diminishing differences between the predictions made by successively adopted conceptual schemes indicate convergence from within ("Cauchy convergence," Rosenberg 1975, §49). Whether the numerical differences in the predictions of successive schemes actually decrease can be determined empirically from within our conceptual schemes. Rosenberg's considerations about convergence thus have two implications. First, we can empirically establish whether our conceptual schemes converge without presupposing a standpoint independent from our conceptual schemes. Second, implementing the right epistemological principles, i.e., Rosenberg's qualitative constraints on conceptual change, will necessarily lead to convergence.[6]

But why should we care for increasing explanatory power, i.e., care for Rosenberg's epistemic norms and thus convergence? Rosenberg (1980,

chap. II) claims that if we are rational agents (and from the inferentialist perspective shared by him and Sellars, this goes hand in hand with being capable of conceptual activity), we necessarily endorse the end of finding increasingly good explanations. As concept-using beings we are necessarily committed to achieving an explanatorily coherent conceptual scheme.

This idea is related to the question of what criteria we can use to decide whether a particular instance of conceptual change was justified. What counts as justification for replacing one conceptual scheme with another cannot depend on the earlier conceptual scheme, for this is the very scheme to be abandoned. It also cannot merely depend on the new scheme to be adopted since any conceptual change whatsoever could then be justified (Rosenberg 1980, 173). However, according to Rosenberg, the change can be justified in a non-arbitrary way if our criteria for justified conceptual change do not depend on our contingent, mutable aims but on our very status as concept users. These criteria would be related to an aim that any user of any conceptual scheme would necessarily need to endorse. In Rosenberg's words, this aim is non-optional; it is a constitutive end.

For Rosenberg, this end is the achievement of a determinate, explanatorily coherent conceptual scheme. It becomes salient when failures of explanations occur or when we encounter inconsistencies in our conceptual schemes. According to Rosenberg, we can retrospectively justify conceptual change if new theories considered for adoption can account for phenomena that the older ones were unable to account for, can explain the older theory's success, and can explain why the older theory failed in the cases where it did. The result of such justified conceptual change, or so Rosenberg claims, will be convergence in the sense described above. For Rosenberg, to countenance the idea of an ultimate reality, of one world, is simply to accept that conceptual change is convergent in this way—or rather *ought* to be convergent, for Rosenberg takes his constraints on conceptual change to be a norm that our practices should, even must, aspire to (Rosenberg 1980, 187). Speaking of one reality or world is accepting this commitment, a commitment all concept users must accept at least implicitly.

In *Properties as Processes*, Johanna Seibt criticizes Rosenberg's approach. According to her, Rosenberg does not take into account Kuhnian considerations about discontinuities in the development of science (Kuhn 1962):

> From a post-Kuhnian perspective, however, it is highly controversial whether scientific development can be seen just to result in a redrawing of the "same map," successively increasing the scale; rather, for some, theory succession appears to effect a production of radically different types of "maps." Certainly, in accordance with Sellars' rather broad notion of a "counterpart," elements of some conceptual structure CS_i

> can always be assigned (sets of) functionally cognate elements of some conceptual structure CS_j, even in cases of radical conceptual discontinuity (how else could we explain the historic role of "Galenic fluids" or "electro-magnetic ether"?). But this does not guarantee, in the case of scientific theories, that with the counterparts of expressions of an earlier theory T_i in a later theory T_j the laws set up in T_i can *just by giving a correction factor* be corrected to yield the results as determined by laws of T_j.
>
> (Seibt 1990, 228; Seibt's emphasis)

As Seibt suggests here, Rosenberg's criteria for what correctly counts as a successor theory to a former theory, the criteria he needs to construct nomological isomorphs of older theories within new theories, are too strict. They are too strict to account for cases of theory succession not characterized by the mere introduction of a correction factor but where we can still trace functional continuities between elements of the respective theories. However, Seibt suggests that Sellars's notion of a conceptual counterpart is flexible enough to cover such cases of "radical conceptual discontinuity" (or cases that Rosenberg would have to treat as discontinuous and thus not part of convergent conceptual development).[7]

Seibt's reference to Kuhn points to a further concern about Rosenberg's approach: predicted measurement values might converge only within a given Kuhnian paradigm, but a scientific revolution might lead to new divergence. If we do not posit an ideal limit "from without" but register whether the differences in predicted measurements between known conceptual schemes diminish, we cannot be sure that the convergence we register is not merely a convergence toward a local limit.[8] Why could the differences between the numerical values predicted by successive theories not diminish steadily for some time before increasing again? These questions do not depend on whether the Kuhnian picture of cycles of normal science, phases of increasing anomalies, and scientific revolutions truly captures the history of science. Rather, the question is how we could exclude the possibility that a Rosenbergian convergence is merely a convergence toward a local limit.

Rosenberg claims that the numerical differences between successive conceptual schemes cannot increase if we comply with his constraint that justified successor theories explain explanatory successes and failures of the predecessor theories (Rosenberg 1988, n. 8). However, like Seibt above, we can ask whether this is a reasonable constraint on what counts as a legitimate, justified successor theory. As Jarrett Leplin suggests in personal communication with Rosenberg (Rosenberg 1988, 184–5; see also Laudan 1981, sec. 6.4), many actual cases of theory succession in the history of science generally regarded as progressive and justified do

not fulfill this requirement. Rosenberg objects that his approach is normative and thus cannot be countered by examples from *actual* scientific development. However, if a normative epistemological theory implies that numerous actual cases of theory succession generally regarded as justified were unjustified, then perhaps we should find fault with the epistemological theory.

So, Rosenberg's attempt at defending Sellars's ideal-limit approach to ideal truth by establishing convergence without a neutral standpoint faces some difficulties. However, Rosenberg offers many insights illuminating Sellars's position on ideal truth. This concerns especially the idea that rational conceptual change is subject to framework-neutral constraints, though not neutral in the sense of being independent from conceptual schemes. Rather, these constraints are universal constraints present in any conceptual framework since they are constitutive of what a conceptual framework is.

Let us turn to Johanna Seibt's proposal. Seibt wants to integrate her more liberal approach to continuous conceptual development with the idea of convergence established from within. However, she tries to provide a different criterion for convergence than Rosenberg: practical success. This criterion does not depend on the very stringent notion of conceptual continuity employed by Rosenberg. According to Seibt, practical progress can be seen as the process of human beings freeing themselves to an ever-increasing extent from their natural limitations. She suggests further that pictorial adequacy might be inferred from practical success at predicting and explaining so that we can understand increasing practical success as an indicator of increasing pictorial adequacy (Seibt 1990, 229).

Seibt's characterization of scientific progress in terms of our improving practical ability to predict and explain fits well with two elements in Sellars's system: the idea that linguistic pictures, like maps, have the purpose of supporting successful navigational practices broadly conceived and the idea that practical aims guide induction and abduction in science (IV, NDL, OAFP). To explain why we should be committed to increase our practical capacities, Seibt links the practical aim of being able to predict and explain to Sellars's approach to morality. For Sellars, morally right actions are those that support the common welfare of "us" (where "we" refers to an embracing community of all rational beings). Seibt writes:

> Conceiving of ourselves as members of a community unified in the intention to promote the total welfare of this community, we know the current CS [conceptual structure] to be embedded in a series of conceptual structures (scientific theories) aiming at the continual increase of practical potential. Since a decrease of natural agentive limitations effected by a theory can be taken as evidence for its increased picture

> adequacy, we thereby know the current CS to be embedded in a series of conceptual structures which aim at the absolute picture adequacy of the [Peircean] CS.
>
> (Seibt 1990, 231)

Seibt's proposal raises several questions. Her aim is to establish convergence for a series of successive conceptual schemes in terms of a "decrease of natural agentive limitations." However, it is unclear how we ought to quantify this decrease in a way that allows us to establish convergence. Even where the narrower ability to predict and explain is concerned, how to quantify this ability is not straightforwardly transparent. Is an increased ability to predict and explain just the ability to make more predictions and come up with more explanations in absolute numbers? Or is it the ability to predict and explain an increasingly bigger share of what we recognize as relevant, i.e., things we think ought to be predicted and explained? What we consider as to be explained and predicted might change with conceptual change, and this would affect how we quantify our explanatory and predictive abilities.[9]

Nevertheless, even if we can address questions like these, Seibt's proposal might still encounter the same difficulty as Rosenberg's approach since it, too, operates with the concept of Cauchy convergence. Even if we can establish an actual increase in our ability to predict and explain from within our current conceptual scheme or a decrease in our limitations by natural conditions, it is not clear why this must indicate a convergence of our conceptual schemes toward some ultimate limit rather than merely to some local limit beyond which our ability to predict and explain might cease to converge (e.g., by adopting a new conceptual scheme which answers many of our old questions for explanation but generates many new unanswered questions). It is also not evident why we should understand a mere increase in our abilities as an indication of convergence toward a limit in the first place. There might be such increases without convergence, as in the case of mathematics, which Sellars considers in SM (chap. V §55).

One suggestion at this point could be to introduce a further ideal-limit concept, now of an ideal limit toward which increases in our ability to act converge. Seibt suggests that there is such a limit when she speaks about "optimal practical functionality" (Seibt 1990, 229). This also harmonizes with claims that she makes in later publications to the effect that we first observe increases in the practical success generated by actually existing successive conceptual schemes, interpret these increases as indicators of the growing adequacy of these schemes, and then project this observation into a hypothetical future to form the *concept* of a limit of conceptual development, i.e., of an ultimately adequate conceptual scheme (e.g., Seibt

2007, chap. 3.3.2). I will call this limit of increases in successful action "ideally efficient agency." However, I will postpone the discussion of this suggestion and first turn to Luz Seiberth's approach, as Seiberth invokes practical success in ways similar to Seibt.

The discussion of Rosenberg's and Seibt's position indicates that there might be a general worry for approaches claiming that we can establish convergence from our position within a series of conceptual schemes. Even provided that we can establish quantitatively that past conceptual schemes have converged, there is an open question as to why we should be warranted in assuming that we are converging toward an absolute limit as long as this limit cannot be posited "from without"—and Seibt and Rosenberg agree with Rorty that this cannot be done.

Seiberth and the concept of ideal truth

In his recent book *Intentionality in Sellars*, Luz Seiberth argues that Sellars's theory of intentionality is closely related to the Kantian themes in his thought. As part of his argument, Seiberth discusses the problem of ideal truth but offers a different approach than the one adopted by Seibt and Rosenberg. Seibt and Rosenberg implicitly accept the idea that to give an account of ideal truth, we need to be able to determine whether our conceptual schemes converge. They also seem to assume that some such claim was part of Sellars's view. Thus, they accept Rorty's first assumption. Their target is Rorty's second assumption, i.e., they argue that we do not need a scheme-independent standpoint to assess whether our conceptual schemes converge.

In contrast, Seiberth argues directly against Rorty's first assumption, i.e., against the idea that we need to be able to assess whether our conceptual schemes converge to grasp Sellars's concept of ideal truth. On the exegetical side, Seiberth argues that Sellars does not claim that we have empirical access to convergence but merely elucidates what conceptual tools we need to be able to think about ideal truth. While I largely agree with this interpretation, I disagree with some of Seiberth's arguments in support of it and with his positive account of Sellars's concept of ideal truth.

After introducing the immanent aspects of Sellars's thought, Seiberth focuses on the problem of continuity across conceptual change in Sellars. Continuity across conceptual change is a central element in his account of how we can grasp the concept of ideal truth from an immanent position. Seiberth's idea seems to be that we can grasp, from our immanent position, that other conceptual schemes are continuous with our own, i.e., that on some level, they represent the same objects as we do but do so more (or less) adequately than we do—a thought which we can then project into a concept of ideal adequacy.

In his account of continuity across conceptual change, Seiberth focuses primarily on stability in reference. He discusses two sources for this stability. First, he claims that we have an invariant concept of objects which stays constant during conceptual change. What changes in conceptual change are merely the specific ways in which these objects are conceptualized. In Seiberth's Kantian terms, our unschematized categories are stable while their schematizations may change (Seiberth 2022, 171). Second, we can grasp that we are always in causal contact with the same objects in the world, even while our conceptualizations of these objects change. To argue this, Seiberth makes use of Sellars's version of the Kantian concept of an intuition. For Sellars, Kant's intuitions are conceptual, singular, indexical representations of an object, •this-such•s, e.g., •this book•. Normally, they are causally elicited by the objects they represent (see, e.g., SM, chap. I; KTI, §10). Seiberth is especially interested in the demonstrative element in these •this-such•s. He claims that while the contribution of the "such"-element to reference may vary from one conceptual scheme to another, the contribution of the "this"-element does not. In Seiberth's words, the "non-conceptual component (demonstrative core) in the direct reference of intuitions […] is invariant across conceptual structures" (Seiberth 2022, 142).

After arguing for the possibility of referential continuity across conceptual change, Seiberth tries to make the notion of progress toward a limit conceptual scheme intelligible. Here, he relies heavily on picturing and the concept of pictorial or representational adequacy. The following is the conclusion of a central argument in the book:

> The isomorphism between objects and languagings of new conceptual structures (as a whole across time) makes possible the thought of grades of matter-of-factual truth in the sense of increasing degrees of adequacy of empirical form across the development of conceptual structures.
>
> (Seiberth 2022, 143)

Concerning Sellars's idea that picturing provides us with an Archimedean standpoint (SM, chap. V §75; see Section 2.3), Seiberth claims that

> far from holding the Archimedean point of view to be one we can really adopt, Sellars here makes it clear, pace Rorty that in his analysis *it enables the thought about an ideal or limit*. Sellars here underlines that the concept of picturing functions as a transcendental postulate enabling us to think about the relation between our language and the world in non-semantic terms.
>
> (Seiberth 2022, 167; my emphasis)[10]

Seiberth highlights that the concept of picturing "enables the thought about an ideal or limit." This suggests that he wants to use the concept of picturing to make the concept of an ideal limit of inquiry intelligible. This limit would be characterized by our ability to generate ideally adequate pictures.

According to Seiberth, we can grasp the concept of ideal pictorial adequacy even though we cannot assess the degree of adequacy of our picturing (see below for a discussion of this claim). He claims that Sellars introduces a *concept* of ideally adequate picturing to provide us with a *concept* of a limit of inquiry and, thus, with a concept of ideal truth. According to this view, Sellars does not want and does not need to argue that our conceptual schemes converge toward an ideal limit and that pictorial adequacy serves as a neutral indicator of this convergence. We merely need to be able to grasp the concept of such convergence.

Some aspects of Seiberth's approach seem potentially problematic. This concerns the work that the notion of direct reference by •this•s can do and the role of picturing in Seiberth's account. I will first discuss the former issue.

Seiberth emphasizes the idea of reference provided by a constant "non-conceptual demonstrative core" in intuition. Probably, the motivation for appealing to *non-conceptual* reference is that concepts, obviously, change in conceptual change. However, if there is a non-conceptual form of reference, which Seiberth locates in the •this• of intuitions, this could provide referential stability across changing conceptual schemes.

But Seiberth's claims might be problematic. On Sellars's account, the •this• in intuition is a counterpart of the •this• we find in overt language and thus ought to exhibit the same functional characteristics. But, •this•s in overt language are not associated with a non-conceptual form of reference. •This•s and •that•s are concepts in their own right, i.e., they come with their own inference rules, which link them to each other and to concepts like •here•, •now•, or •I• (see also Sicha 2002, §185). Also, Sellars seems to reject the idea of pure demonstrative reference in Kantian intuitions (BD, §69; IKTE, §47; SRPC, §§14–16).[11]

At least on David Kaplan's seminal theory (Kaplan 1989b), •this•s refer indeed directly and rigidly. But it is not clear that this alone can provide us with the notion of stability in reference across conceptual change that Seiberth seeks, i.e., a reference that is "invariant across conceptual structures." For Kaplan, the reference of •this•s is fixed by contextual information about what is salient to the speaker and hearer (things can be made salient, e.g., by pointing or based on common ground) or alternatively by the speakers' referential intentions (Kaplan 1989a). Imagine two speakers: a user of our current conceptual scheme and a user of an imaginary future conceptual scheme. The first user points to a particular

book and utters "This is a book." A hundred years later, the user of the future conceptual scheme points to that very book and says "This is an aggregate of microphysical particles." Both •this•s refer directly and rigidly. That is, for each of the two •this•s, once its referent is established, it picks out the same object in different possible worlds.

But do both •this•s co-refer, i.e., do they both pick out one and the same object in every possible world? To establish that they do, we need more than a theory of demonstrative reference such as Kaplan's. What the two •this•s used by our speakers pick out in the two situations is determined by what is salient in the context of speech or by the speakers' referential intentions. Still, either of these must be specified in terms of some conceptual scheme. Thus, we might say, e.g., that speaker 1 intends to refer to a certain *book* and that speaker 2 intends to refer to a certain aggregate of microphysical particles. The •this•s refer directly and rigidly, e.g., the first •this• refers to the same book in every possible world where the book exists (this allows me to say things like "This book could have cost much less than it did."). That, on its own, however, does not establish that the two •this•s co-refer. This is not to say that they do not co-refer, but only that considerations about demonstrative reference do not establish this co-reference (other considerations might do so, e.g., Sellars's "ideal-successor externalism," see Matsui 2021). If what Seiberth means by a demonstrative reference invariant across conceptual schemes is characterized by co-reference of •this•s in situations like those considered above, more is needed to explain why these •this•s co-refer.

Perhaps Seiberth means that the •this• in a •this-such• captures a causal element needed for reference. Sellars emphasizes that statements about what refers to what convey information about causal regularities relating objects in the world and the occurrence of certain linguistic items, e.g., names (NAO, chap. 1 §27). Seiberth might then claim that we grasp that the causes of our intuitions or what affects us when we have an intuition must be stable across conceptual schemes, regardless of how we conceptualize these causes specifically through a "such"-element. But it is hard to see what the notion of a stable demonstrative core in intuitions adds to the claim that what we stand in causal relations with or what affects us in perception is stable through conceptual change.[12] So, we might work with the latter idea. However, I will argue below that even this will not be enough to make the concept of ideally adequate picturing intelligible.

Let us look at Seiberth's appeal to pictorial adequacy. His considerations provide a good context for a more detailed discussion of ideally adequate picturing. Seiberth suggests that the concept of ideally adequate picturing allows us to form a concept of ideal truth. As we have seen, authors like Rorty and Rosenberg are skeptical about this idea. According to Seiberth, we can circumvent their misgivings by denying that to grasp

the concept of ideal truth, we need to be able to assess the degree of pictorial adequacy of our conceptual schemes. We merely need to grasp the *concept* of pictorial adequacy and its ideal limit, ideal pictorial adequacy.

However, the notion of ideally adequate picturing is just as much in need of elucidation as the concepts of ideal truth or an ultimate conceptual scheme. While Seiberth may be right that we do not need to be able to neutrally establish degrees of pictorial adequacy to understand the concept of ideally adequate picturing, we are still facing the question how we *are* to understand the concept. I will argue that Seiberth cannot make the concept of ideally adequate picturing intelligible in the way his line of reasoning requires.

How should we understand ideally adequate picturing? We can extract several possibilities from Seiberth's discussion and other authors (e.g., Seibt's and Rosenberg's accounts discussed above, but also Williams 2016):[13]

1 Ideally adequate picturing is the causal mapping relation generated by the Peircean conceptual scheme.
2 Ideally adequate picturing is a causal mapping of objects neutrally conceived, e.g., conceived as Seiberth's invariant objects or the invariant causes of our intuitions.
3 Ideally adequate picturing is a causal mapping process underlying a practice of prediction which is ideally successful.
4 Ideally adequate picturing is a causal mapping process underlying conceptual practices which allow for ideally efficient action.[14]

Seiberth appeals to options 2–4. However, I will argue that these options are only reasonable if we already presuppose a concept of an ultimate, Peircean conceptual scheme, i.e., a concept of an ideal limit of inquiry (option 1 presupposes it trivially). And if we understand the concept of a Peircean conceptual scheme, we do not need the further notion of ideally adequate picturing to understand Sellars's concept of ideal truth. Thus, if the concept of ideally adequate picturing can only be understood once we grasp the concept of a Peircean conceptual scheme, the former concept does not seem to do any substantial work in an account of ideal truth. As a result of my discussion, I will side with Rosenberg's rejection of the idea that the notion of ideally adequate picturing is useful in making the concept of an ultimate conceptual scheme and thus ideal truth intelligible.

According to an objection sometimes raised against Rorty's and Rosenberg's critical stance toward picturing, these authors illegitimately attribute the claim to Sellars that we need to be able to empirically assess degrees of pictorial adequacy (Seiberth 2022, but also Sicha 2014 and Williams 2016). However, we cannot overturn Rorty's and Rosenberg's

criticism of the notion of ideally adequate picturing this quickly since their claim is more subtle than this. It has the structure of a dilemma. The claim is that *if* we think that degrees of pictorial adequacy are neutrally empirically assessable, our position becomes unintelligible. However, *if* we attribute a non-epistemic role to picturing in our account of ideal truth, e.g., the role of merely clarifying the concept of ideal truth that Seiberth wants to attribute to it, picturing becomes idle in an account of ideal truth.

Let us first have a look at option 2. A problem that Rorty and Rosenberg raise for the concept of ideally adequate picturing is that

> [a] conception of what is pictured, in other words, seems to be available only from within a single conceptual scheme, and that will not do for an Archimedean standpoint.
>
> (Rosenberg 1975, §44)

Each conceptual scheme conceives of what is pictured in language and thought in its own way. For Rorty and Rosenberg, this is one reason why different conceptual schemes cannot be compared neutrally concerning their pictorial adequacy. At most, they can be compared for pictorial adequacy perspectivally, i.e., relative to some authoritative conceptual scheme and its conception of what objects there are in the world.

However, Seiberth argues that any concept user must be equipped with an invariant object concept or a concept of the invariant causes of our intuitions across conceptual change. This invariant concept is stripped of the peculiarities of how we conceive of objects in specific conceptual schemes and thus shared by users of any conceptual scheme. Through this invariant concept, we then grasp that we picture the same objects that were pictured by our predecessors and will be pictured by our successors—even though we and they conceptualize these objects differently. There could then be room for Seiberth to say that while this invariant object concept does not allow for comparing the pictorial adequacy of different conceptual schemes, it at least gives sense to the concept of ideal pictorial adequacy. To picture ideally adequately would be to picture these invariant objects adequately. In the formal mode, this invariant object concept would probably be reflected in Sellars's "*logical* or 'formal' criteria of individuality which apply to any descriptive conceptual framework" (SM, chap. V §66; Sellars's emphasis).

I do not want to polemicize with the idea that we have and need such an invariant concept of objects. However, it is unclear that this concept helps to make the idea of ideally adequate picturing intelligible. This notion is too thin to give us a sense of what it could mean to picture such objects adequately.

The objects pictured in linguistic pictures are pictured as having specific properties and standing in specific relations. These properties and relations have counterparts in a linguistic picture of these objects (the properties

of names and relations between names considered as natural-linguistic objects). For a linguistic picture to be adequate, the properties of names in the picture would have to systematically covary with the properties of the pictured objects (and the relations between names with the relations between the pictured objects). But our invariant object concept is the concept of an object stripped of all specific properties and relations to other objects. Thus, it is not clear what it means to say that such an object is adequately pictured.

Any sense we could give to the idea of adequately picturing invariant objects or the invariant causes of our intuitions would have to stem from presupposing that these objects are conceptualized in some way. Regarding ideally adequate picturing, the only reasonable candidate for this is the conceptualization provided by the Peircean conceptual scheme. However, Seiberth cannot presuppose the concept of a Peircean scheme since the idea of some such ideal limit is what he wants to make intelligible in the first place (see Seiberth 2022, 167, cited above).[15]

Maybe aware of these difficulties, Seiberth looks for further elucidations of the concept of ideally adequate picturing. He appeals to the idea of practical success:

> A conceptual structure may function better than another, earlier one. And it is legitimate to attribute this comparative "better functioning" (greater success at tracking objects, prediction outcomes of experiments) to a higher degree of pictorial adequacy.
>
> (Seiberth 2022, 175)

Seiberth claims here that a "better functioning" of a conceptual system can only be explained by this system's higher degree of pictorial adequacy. Via abductive reasoning, we can then attribute higher degrees of pictorial adequacy to conceptual systems that function better. We have already encountered this thought in Seibt's proposal.[16]

> What does "better functioning" mean? Seiberth suggests that
>
> [t]o ask: "How do we know one conceptual structure is preferable to another?" is to misunderstand our situation. We have no independent standpoint for addressing this question. The comparative success of a later conceptual structure we ascertain by successfully living in it.
>
> (Seiberth 2022, 168)

What "successfully living" means is, of course, not initially transparent. Do we live more successfully in our current conceptual scheme than the Ancient Greeks did in theirs?[17] Seiberth sometimes construes practical success narrowly as epistemic success (corresponding to our option 3):

> To think the thought of progress from [our conceptual structure] to a later conceptual structure is to think the thought of our making more coherent and successful predictions.
>
> (Seiberth 2022, 174)

In other places, he construes practical success more broadly as successful action in general (corresponding to our option 4):

> A regulative ideal gives us a practical sense of "better", better relative to our need to get around in the world.
>
> (Seiberth 2022, 194)

Section 3.2 will discuss the appeal to practical success more broadly conceived. For now, I want to argue that the narrower appeal to epistemic success alone does not help us make the concept of ideally adequate picturing intelligible.

Seiberth claims that increased success at prediction indicates growing pictorial adequacy. By implication, *ideal* predictive success would be an indicator of ideally adequate picturing (Seiberth 2022, 175). Sellars himself focuses on our ability to predict and explain when he discusses rational conceptual change. In IV, he writes that the aim of accepting new scientific laws, an instance of conceptual change, is to be in

> the state of being able to draw inferences concerning the composition with respect to a given property *Y* of unexamined finite samples (ΔK) of a kind, *X*, in a way which also provides an explanatory account of the composition with respect to *Y* of the total examined sample, *K*, of *X*.
>
> (IV, §52)

The ability to draw inferences about unexamined samples of a kind is the ability to make predictions. Sellars calls this ability and the ability to explain "a logically necessary condition of being in the very framework of explanation and prediction" (IV, §62). It might thus appear promising to invoke ideal predictive success as an indicator of ideal pictorial adequacy.

However, "successful prediction" is an ambiguous phrase, and Sellars probably uses it differently in the passage above than Seiberth does in his discussion. "Successful prediction" might be synonymous with "true prediction." This seems to be the sense in which Seiberth uses the phrase. However, in a second sense, "successful prediction" merely means the ability to make predictions, regardless of whether they turn out to be true.[18] This second sense aligns more with Sellars's exposition in the passage above. Sellars claims that our aim, in nomological induction, is to be in a state of "*being able* to draw inferences" about the composition of

samples or "*being able* to draw inferences concerning the unknown and give explanatory accounts of the known," but *not* being in "the possession of empirical truth" (IV, §62).

This second understanding of "successful prediction" as having the ability to draw inferences about new cases does not seem to be the sense of "successful prediction" that Seiberth has in mind. However, if we understand predictive success in his sense, i.e., as making *true* predictions, we will be thrown back on some of the questions we started with. In what sense would these predictions be true? If they are true immanently, i.e., semantically assertible by us, we return to our initial problem of how this immanent viewpoint could allow us to form a transcendent concept of ideal adequacy. On the other hand, if the predictions are meant to be true ideally, i.e., in the sense of being assertible according to a Peircean conceptual scheme, Seiberth will again presuppose the concepts that he wanted to clarify. At least, more argument is needed to show that the notion of increasing predictive success helps us grasp Sellars's concept of ideal truth.

Nevertheless, there is clearly something valuable in the appeal to predictive success. However, what this is might not be brought out best by an appeal to true prediction since truth is precisely the concept under discussion. Instead, what is valuable in the suggestion is the idea that we ought to avoid predictions that are not borne out. If, based on our conceptual scheme, we predict that p but observe that $\neg p$, this indicates that our conceptual scheme is not well-functioning to some degree. We might then overcome this situation by discounting the observation or by changing our concepts, i.e., by adopting different inference principles (e.g., scientific laws). However, this latter step might be better accounted for by Sellars's notion of explanatory coherence than by an appeal to truth (see Section 4.3).

The discussion suggests that the options for making the concept of ideally adequate picturing intelligible that we considered here are problematic (pending a discussion of successful action broadly construed in Section 3.2). On Seiberth's position, the concept of ideally adequate picturing was meant to elucidate the concept of an ideal limit of inquiry and, thus, ideal truth. However, all the workable attempts at clarifying the concept of ideally adequate picturing that we have explored so far tacitly rely on the concept of an ideal limit of inquiry or the Peircean conceptual scheme.[19]

These problems may not be evident at first sight because at least a perspectival comparison of the adequacy of different conceptual schemes seems possible. That is, we might, for instance, be able to compare the predictive success, practical success, or pictorial adequacy of past conceptual schemes to those of our own scheme as judged by the standards of that scheme. Our options 2–4 of how to understand ideally adequate picturing, however, try

to project our understanding of such comparative adequacies into a notion of *ideal* adequacy. But it is unclear what point we are projecting to in these cases. To specify that point, it seems that we already need to appeal to the notion of a Peircean scheme or an ideal limit of inquiry.

I thus side with Rosenberg's diagnosis that the concept of ideally adequate picturing does not help define ideal truth, even though it is not wrong to say that our ultimate conceptual scheme would generate perfectly adequate pictures. As Rosenberg (2007b) claims, we can understand this latter point as a direct consequence of Sellars's account of picturing. But that does not mean that the concept of picturing can help us grasp what an ultimate conceptual scheme or ideal truth is.[20]

I now want to discuss option 2, i.e., the appeal to ideally successful action for elucidating Sellars's notion of ideal truth. After this, I will return to picturing one last time. I claimed that the notion of picturing does not help elucidate the concept of an ultimate conceptual scheme and, thus, ideal truth. However, it is not unreasonable to read the Sellars of *Science and Metaphysics* as committed to the idea that picturing can do some real work in defining the concept of an ultimate conceptual scheme or an ideal limit of inquiry. His Archimedean-point passage suggests this strongly:

> Peirce himself fell into difficulty because, by not taking into account the dimension of "picturing," he had no Archimedeian point [sic] outside the series of actual and possible beliefs in terms of which to define the ideal or limit to which members of this series might approximate.
>
> (SM, chap. V, §75)

Since I want to provide a Sellarsian reconstruction of how we can understand the concept of ideal truth without appealing to picturing, I need to defend the idea that these claims in SM can be disregarded with good reason. I will do so in Section 3.3.

3.2 Practical success

The theme of practical success looms large in discussions of Sellars's concept of ideal truth, e.g., in Seibt and Seiberth.[21] It seems attractive for several reasons. Sellars closely connects picturing to action, and it can, therefore, appear like a straightforward idea to account for ideally adequate picturing in terms of action. When Sellars discusses his map analogy of linguistic picturing, he claims that

> the point of being a map is to translate into sentences which dovetail with *practical* discourse about getting from point A to point B.
>
> (NAO, chap. 5 §77; Sellars's emphasis)

In the late essay "Mental Events," which is centrally concerned with picturing (or "representation," as Sellars calls it there), he writes:

> The root of the idea that symbol S represents object O is the idea that S belongs to a [representational system] in which it is so connected with other features of the system (including *actions*) as to be the focal point of a strategy for finding O.
>
> (MEV, §65; Sellars's emphasis)

The notion of practical success might thus seem helpful when we want to understand ideally adequate picturing. If the purpose of picturing is to enable us to navigate the world, in the broad sense of not only finding things and places, but also fulfilling other needs, it might make sense to say that ideally adequate pictures would enable us to navigate ideally well. The following discussion thus addresses our pending option 4 of how to characterize ideally adequate picturing.

A second relevant role for action and practical reasoning is related to explanatory coherence. Sellars claims that we justify the adoption of new laws and theories through a complex, interrelated set of arguments. The basic one of these is a practical argument, i.e., an argument concluding in an intention (see IV; NDL; OAFP). Sellars formulates this practical argument in the following way:

> I shall bring about [end] *E*
> (but bringing about *E* implies accepting a proposition, if it satisfies condition *C*)
> so, I shall accept a proposition, if it satisfies condition *C*
> [hypothesis] *h* satisfies condition *C*
> so, I shall accept *h* (IV, §31)[22]

In Sellars's thought, adopting new laws and theories is closely connected to explanatory coherence, a feature that characterizes his Peircean conceptual scheme. What drives the acceptance of a law or theory is practical reasoning motivated by our intention to bring about a certain end (which I will discuss more in Section 4.3). Practical success in realizing the end that drives the adoption of laws and theories might, therefore, be a fundamental element in Sellars's account of an ultimate conceptual scheme and, thus, of ideal truth.

In what follows, I want to argue against a particular way of using the concept of practical success to give content to Sellars's notion of ideal truth. This idea can be found in both Seiberth and Seibt. They argue that if using some conceptual scheme secures greater practical success than using another scheme, we must attribute greater adequacy to the former scheme.

The strategy that I will discuss is to construct a further limit concept on this basis. This is the concept of a limit toward which increases in practical success would converge. I will call this limit "ideally efficient agency." On this strategy, Sellars's Peircean conceptual scheme or an ideally adequate picturing process could then be understood as enabling ideally efficient agency.

Using the concept of practical success in this way seems also attractive because, at least at first sight, we can straightforwardly assess whether our actions are successful. While we may not be able to know to what degree we picture the world adequately, it seems that we can know, at least usually, whether our actions are successful, i.e., whether we have realized our intentions.[23]

Seibt claims that

> [i]f we further take practical success to be an indication for the adequacy of a conceptual structure (scientific theory) as a picture of "reality," then we can say that the convergence of scientific theories is guaranteed by the pragmatic dimension of science to remove the restrictions that nature imposes on the action space of humans.
>
> (Seibt 1990, 229)

In her more recent writings on picturing, she characterizes the Peircean conceptual scheme as a scheme that "*ideally* supports our navigational tasks" (Seibt 2009, 267; my emphasis).[24] As we have seen, Seiberth invokes similar ideas. I will argue that this strategy faces problems, both for general reasons and for reasons derived from Sellars's practical philosophy.

Contrary to first appearances, the thought that acting in the world provides us with immediate feedback on the quality of our conceptual schemes might need defense. As BonJour (1985, 228) points out, "we do not somehow have direct, unproblematic access to the fact of pragmatic success but must determine it, if at all, via some complicated process of observation and assessment." Suppose, for instance, that I have an intention to switch on the light in my living room. Given Sellars's rejection of the myth of the given, the statement "I have switched on the light in my living room" needs epistemic support by other statements. Statements about the success of our actions are just further elements in a system that we strive to make coherent. Such statements are important, but they do not have a fundamentally different status from other elements in the system.

Although authors like Seibt and Seiberth sometimes write as if we had immediate access to whether we act successfully, perhaps they do not need to rely on this idea of immediacy. For example, it might be enough to claim that we have a more immediate grasp of the *concept* of successful action than, e.g., of the concept of truth since successful action is fundamental

to organisms like us. I do not want to discuss whether BonJour's argument can be avoided in this or any other way. Instead, I want to focus on whether the limit concept of ideally efficient agency is intelligible and useful. My aim is to show that this concept may be less clear than it seems, even should Seiberth's and Seibt's strategy prove resistant to BonJour's objection.

Authors who appeal to the concept of ideally efficient agency usually do not discuss it in detail. In what follows, I will explore several options for understanding this concept and show that how to spell it out is not straightforwardly clear. Also, some ways of spelling it out already presuppose the concept of an ideal limit of inquiry or of a Peircean conceptual scheme, i.e., concepts we wanted to grasp through the notion of ideally efficient agency in the first place.

Let us look at a first possibility of how to understand ideally efficient agency. According to this conception, ideally efficient agents can realize *any* goal or intention they could form.[25] This possibility is suggested by Seibt's characterization of growing practical adequacy as agents freeing themselves from their natural limitations.

However, this characterization of ideally efficient agency faces problems. The realization of some intentions will be excluded by the laws of nature. For example, we could never realize an intention to move faster than light, not even at the ideal end of inquiry. Maybe we could exclude from consideration intentions the realization of which is straightforwardly ruled out by the laws of nature. Nevertheless, further intentions will remain unrealizable because of facts about the respective agents (in combination with laws of nature). To be agents acting causally on the world, our Peircean descendants would have to be embodied in some way. This embodiment could be very different from our current one, of course. They might not be humanoid; they might be patterns of electrical currents, but they would need to have *some* physical form or substrate. However, embodiment comes with constraints on what intentions can be realized. Probably not even a Peircean could jump to the Moon or move a 50-ton stone block by her physical means. If it is not precisely these things that she cannot do, there would be others. This inability would not be due to missing factual information or a less-than-ideal conceptual scheme. It would simply be impossible for the agent to do these things because of her physical constraints. Given embodiment, there seems to be no way of removing all "restrictions that nature imposes on the action space of humans." So, it seems implausible that "ideally efficient agency" could mean the ability to realize any intention. Even an agent at the ideal end of inquiry would not have this ability.

As a second possibility, we could try to understand ideally efficient agency as the ability to realize any intention that *can* be realized given

the laws of nature, our physical constraints, and the state of the world.[26] That is, ideally efficient agency would be the ability to realize any intention which it is physically possible for us to realize in our world. However, this suggestion comes with its own problems. How do we find out what it is physically possible for us to do, i.e., about the natural laws, the facts concerning us as agents, and the contingent state of the world that constrain action? From Sellars's viewpoint, the only reasonable answer to this question is that we find this out by scientific inquiry. However, according to Sellars, scientific knowledge is complete only at the ideal end of scientific inquiry. Thus, we can ultimately know only at this ideal endpoint what it is possible for us or for our Peircean descendants to do. Our current suggestion for understanding ideally efficient agency, therefore, seems to appeal tacitly to the notion of the ideal end of inquiry or an ultimate conceptual scheme. The concept of ideally efficient agency thus conceived does not seem more readily graspable within Sellars's framework than these latter concepts.[27]

Someone might object that this reasoning conflates our concept of physically possible action with knowledge about what specific actions are physically possible. We might have the concept of physical possibility without having such knowledge, much as we can have the concept of a cause without knowing the specific causes of a certain event. According to the objection, as Sellarsian concept users, we always already have at least an implicit concept of physical possibility, much as we always already have at least an implicit concept of cause. The objector could then claim that having this concept of physically possible action is sufficient for understanding the notion of ideally efficient agency on our second option.

However, in Sellars's setting, ideally efficient agency is a transcendent concept in a similar sense in which ideal truth is a transcendent concept. It is not the immanent concept of successful action according to the standards of our current or simply some conceptual scheme. For example, imagine a conceptual scheme that accepts the semantic rule expressed in "Whales are fish." I am a user of this scheme, and I intend to catch a fish. I somehow manage to catch a whale. According to the standards of my scheme, I have successfully realized my intention to catch a fish and understand myself to have done so. Nevertheless, my action does not seem to be an instance of ideally efficient agency (at least this seems doubtful from the perspective of our current conceptual scheme). Similarly, a user of an Aristotelian conceptual scheme could not even have the intention to entangle two quantum particles. Assessment of our ability to realize this intention would not even enter into an assessment of our overall ability to act successfully for a user of this conceptual scheme. We therefore need to distinguish efficient action as conceived by our (or some) conceptual scheme from *ideally* efficient action.

From Sellars's perspective, the concepts of possibility and necessity are covertly metalinguistic (CDCM). In the formal mode, the material-mode statement "It is physically possible that *p*" corresponds to the statement that *p* is not contradicted by the conclusions of good material inferences.[28] However, it is important which set of material inference rules we consider. In Sellars's framework, it makes sense to recognize an immanent concept of physical possibility. In the formal mode, the material-mode "It is physically possible that *p*" would correspond to the statement that *p* is not contradicted by the conclusions of *our* good material inferences.[29] But this immanent concept of physical possibility is not what we need to define ideally efficient agency. Our immanent conception of what intentions it is physically possible to realize changes with conceptual development and is improved upon in other conceptual schemes, e.g., allowing for completely new actions, such as entangling two quantum particles, to be physically possible.

On our second alternative for understanding ideally efficient agency, we need a transcendent concept of physical possibility, as what is ultimately or "really" physically possible in order to distinguish efficient action as conceived by our (or some) conceptual scheme from *ideally* efficient action. Ideally efficient agency would be, on this way of conceiving of it, the concept of successfully realizing any action which it is *ultimately* possible to realize, i.e., according to what we would understand as physically possible at the ideal end of inquiry. The concept of physical possibility needed to give content to the idea of ideally efficient agency, on our second alternative, is thus a concept tied to the idea of an ultimate conceptual scheme.

There are further problems with understanding ideally efficient agency as the ability to realize any physically possible action. These are due to constraints concerning distributivity in modal operators, such as "it is possible that." Suppose that it is physically possible for me to realize intention A (going to the cinema tonight) and that it is physically possible for me to realize intention B (working on a philosophy paper tonight). It does not follow that it is physically possible for me to jointly realize *both* intentions A and B. Thus, there is not *the* set of actions which it is physically possible for us to realize. Individually physically possible actions are organized into more restricted mutually exclusive subsets of jointly realizable actions. It is not initially clear according to what criteria we should pick out one of these subsets as decisive for ideally efficient agency.[30]

But maybe we can restrict the class of actions relevant to ideally efficient agency further so that only one set of actions remains. We could try to decide between different sets of jointly realizable actions by asking how much realizing a particular set of actions would contribute to our aims. To avoid arbitrariness, the relevant aim ought to be one that we, or any rational being, must have.

Within Sellars's framework, one candidate for such an aim is our communal aim of maximizing our common welfare, expressed in the community intention

We shall foster our common welfare.

If the scope of the "we" in this intention includes all rational beings, this intention defines what Sellars calls "the moral point of view." Intentions derivable from this overarching intention are "categorically reasonable," and the actions or states of affairs intended in such intentions are morally required, i.e., they are actions or states of affairs that we ought to realize (for a detailed discussion, see SM, chap. VII).

Thus, as a third option, we might try to understand ideally efficient agency as the ability to realize any intention that can be derived from the aim of maximizing our common welfare, i.e., any intention that we morally *ought* to realize. Seibt's approach sometimes points in this direction. Thus, she constructs a link between the demand on scientific theories to increase our practical capacities and Sellars's approach to morality through his claim from NDL that "it is because truth is a necessary condition of securing the common good that the search for it presents itself for us, on reflection, as categorically reasonable" (NDL, §59; for discussion, see Section 4.3).[31]

Sellars claims that what we morally ought to do is "in principle, unequivocal" (SM, chap. VII §78). So, he thinks that, ultimately, there is only one set of categorically reasonable intentions. These categorically reasonable intentions can be derived by practical reasoning from our overarching intention to foster our common welfare. In Sellars's framework, practical reasoning means primarily reasoning with intentions. Sellars develops an intricate theory of reasoning with intentions (see, e.g., IILO; TA; VR; CPCI), but here, only one aspect of his approach will be important, an aspect concerning the relation between theoretical and practical reasoning.

Sellars regards the inference principles we adopt in practical reasoning as parasitic on the inference principles we adopt in reasoning with beliefs or statements. According to a principle which appears in many of his texts (and which he calls "S-IMP" later in his career)

> "It is the case that-P" implies "it is the case that-Q" ↔"It shall be the case that-P" implies "it shall be the case that-Q"
>
> (SM, chap. VII §13)[32]

The left-hand side of S-IMP is an inference principle governing indicative contents, e.g., beliefs or statements. The right-hand side is an inference principle governing intentions. Although the principle is a biconditional,

there is an asymmetry in the background regarding how these inference principles are established. For Sellars, the only ground for accepting an inference principle governing intentions, i.e., for accepting the right-hand side of the biconditional, is the acceptance of an inference principle on the left-hand side, i.e., an inference principle governing beliefs or statements. Sellars claims that "all of the implications involved in practical reasoning can be established in the first instances as implications pertaining to matters of fact" (SM, chap. V §14(i)).

While some of the relevant inference principles are formal ones, the more important ones are principles of material inference, particularly those conveyed by empirical laws. The truth of a principle of material inference like

"This match is struck" implies "This match lights"

establishes, by S-IMP, the truth of the corresponding inference principle for intentions

"Shall be [This match is struck]" implies "Shall be [This match lights]."[33]

Inference principles of this type are especially salient for practical reasoning because they formulate means-ends relations.

However, science establishes what empirical laws and, thus, what inference principles governing beliefs or statements we ought to adopt. Via S-IMP, science, therefore, indirectly determines which inference principles governing intentions we ought to adopt and, thus, which intentions are categorically reasonable.[34] This lands us back in the considerations advanced in discussing physically possible action. What it is categorically reasonable for us to do is what would be derivable from the intention "We shall foster our common welfare" according to inference principles established at the ideal end of inquiry. Thus, to appeal to the notion of categorically reasonable intentions to define ideally efficient agency is already to appeal to the concept of an ideal end of inquiry or the Peircean conceptual scheme.

Sellars's claims concerning the role of science in establishing what intentions are categorically reasonable and, thus, what actions are morally good are not uncontroversial. Also, the exegetical ice is not as thick as one could wish in this case. There might be room to use Sellars's approach to categorically reasonable intentions in a way that avoids an appeal to the ideal end of inquiry.

On such a reading, Sellars would have to claim that we can establish the categorical reasonableness of some intentions conclusively before the ideal end of inquiry. Willem deVries (2005) has put forward thoughts pointing in this direction.[35] He claims that

> [t]he manifest image raises empirical questions it is not in a position to answer, but the scientific image is. The opposite is true in matters of practice: the scientific image raises practical questions it is not in a position to answer.
>
> (deVries 2005, 272)

Applied to our discussion, deVries's position seems to be this: the manifest image has priority over the scientific image regarding at least some practical questions. In Sellars's framework, practical questions about what we ought to do concern the categorical reasonableness of the respective intentions (deVries explicitly relates his ideas to categorical reasonableness, deVries 2005, 272). Thus, deVries's approach seems to imply that, for some intentions, we can ultimately settle already within the manifest image whether they are categorically reasonable, i.e., before Sellars's ideal end of inquiry.

This reading, however, seems hard to square with Sellars's other commitments. To establish the reasonableness of an intention like "It shall be that *p*" would be to establish the inference principle

> "We shall foster our common welfare" implies "It shall be that *p*."

These inference principles appear on the right-hand side of S-IMP. If we could ultimately establish some such inference principle before the ideal end of inquiry, we would simultaneously establish the respective inference principle governing descriptive statements on the left-hand side before the ideal end of inquiry since S-IMP is a biconditional.[36]

However, this would mean getting entangled in Sellars's myth of the given in a form that could be called "the myth of the practical given." For some practical question to be ultimately settled before the ideal end of inquiry would be, by S-IMP, for some factual question to be ultimately settled before the ideal end of inquiry. This would clash with Sellars's claim that science

> is a self-correcting enterprise which can put *any* claim in jeopardy, though not *all* at once.
>
> (EPM, §38; Sellars's emphases)

The question of whether some intention is categorically reasonable thus ought to be susceptible to scientific inquiry wholesale for Sellars.[37] Due to these considerations, I lean toward my initial reading, according to which the ultimate reasonableness of our intentions can only be established at the ideal end of inquiry according to him. On this basis, we cannot use the concept of categorically reasonable action to define ideally efficient agency without already appealing to the notion of an ideal end of inquiry.

As an alternative to understanding ideally efficient agency in a positive way, we might explore a negative option by emphasizing the absence of possible failure of action. Ideally efficient agency might mean that "nothing could go wrong" when we act, i.e., that no instance arises where we form an intention but then fail to realize it. However, taken on its own, this characterization of ideally efficient agency seems too weak. Nothing could go wrong also in cases where we form only a limited set of unambitious intentions. If you do not have the concept of an electron, you could not fail to realize an intention to detect electrons in certain circumstances since you could not form the respective intention. However, that would fall short of ideally efficient agency. Some positive characterization seems to be needed.

I have explored several ways of clarifying the concept of ideally efficient agency to make it useful in understanding Sellars's concept of an ideal end of inquiry or an ultimate conceptual scheme (or ideally adequate picturing). The idea that ideally efficient agency is the ability to realize any intention turned out to be unworkable. However, the two suggestions limiting the scope of intentions relevant for ideally efficient agency already had to appeal to the concept of an ideal end of inquiry.

The concept of ideally efficient agency, in particular, might seem attractive at first sight for making sense of Sellars's concept of ideal truth because of Sellars's strong emphasis on the practical domain. However, to advocate such an approach, we would need to spell it out in more detail than this is usually done. The discussion here is not meant to rule out this approach, but it shows that perhaps contrary to first appearances, appealing to successful action might not help to make Sellars's concept of ideal truth intelligible more straightforwardly than other approaches.

At the same time, the idea that there is some place for action and the practical domain in Sellars's story is sensible. However, this place might not be that of a further ideal-limit concept like ideally efficient agency. I will return to the question in Section 4.3. Before, however, I would like to raise doubts about the historical importance of another Sellarsian concept often related to ideal truth—that of ideally adequate picturing.

3.3 The regulative role of picturing

Seibt and Seiberth try to retain a prominent place for Sellars's concept of picturing in their accounts of ideal truth. Of the authors I have discussed, only Rosenberg claims that picturing does not contribute substantially to an account of ideal truth. According to him, although it is not wrong to say that an ultimate conceptual scheme would allow us to picture the world ideally adequately, this is uninformative. I sympathize with Rosenberg's diagnosis. As argued in Section 3.1, defenders of a substantial role for

picturing in Sellars's account of ideal truth would have to say more about how ideally adequate picturing is to be conceived without already presupposing the concept of an ultimate, Peircean conceptual scheme.

However, this leaves us in an uncomfortable exegetical position. Sellars clearly thought, at least at times, that picturing was crucial for his account of ideal truth. Can we disregard Sellars's claims in this case? This section argues that there are reasons to think that we can. In contrast to Seibt or Seiberth, I will not attempt to interpret Sellars's claims about pictorial adequacy from SM in a way that makes them unproblematic. Instead, I want to dispute the importance of these claims.

This section focuses on two functions of the concept of picturing in Sellars's thought. It has more than these functions, but I am specifically interested in the contrast between the two functions that I will discuss.[38] First, picturing provides a causal relation between conceptual items, especially empirical statements, and the world. I will call this the "causal-tie" function of picturing. Second, picturing has a "regulative function"[39] for Sellars. As already discussed, the idea here is that we can form the concept of ideally adequate linguistic pictures, which is meant to help us understand the notion of an ideal limit of scientific inquiry, a regulative ideal which we ought to approximate. I will argue that considerations about the development of the concept of picturing during Sellars's career indicate that we ought not to overemphasize the importance of this latter role of picturing for his thought overall.

Sellars's notion of picturing underwent changes during his philosophical career. The core idea of a causal projection process that creates a map-like representation of the world for navigational purposes broadly conceived seems not to vary. But there is an evolution from Sellars's earlier accounts of picturing (BBK, TC, NS) to his late discussions (especially MEV) in several more peripheral aspects. For example, the earlier account suggests that only conceptual items in the full sense picture (in their guise as natural-linguistic objects). The later account, however, includes proto-conceptual or animal representation systems and thus even makes room for conceiving sensory states as Sellarsian pictures (Rosenberg 2007b, 113; Seibt 2016). Sellars also shifts his focus from considering picturing from a transcendental perspective, i.e., as a precondition for meaningfulness and truth, in earlier texts toward understanding picturing as a schematic theoretical approach in cognitive science.[40] Moreover, starting from the 1970s, especially NAO, Sellars seems ready to align his ideas about picturing with the then-developing causal theories of reference (e.g., Kripke 1972).[41] I mention these interesting developments just to put them aside. My focus will be on how the relative importance of the two roles of picturing introduced above evolved during Sellars's career.

Sellars hints at something like picturing already in a footnote in one of his earliest essays, RNWWR from 1948:

> Consider an item in the world designated by a world-story, where the item is a token of a sentence which designates another item in that world. Thus (1) the first item *qua* token designates the second item. Now (2) consider the relation of the first *qua* item in the world to the second item. […] The ineffable mapping of which Wittgenstein speaks is thus capable of characterization in pure pragmatics, for it is the confusion of *token-designation* as in (1) and the mapping characterized in (2).
>
> (RNWWR, n. 16; Sellars's emphasis)

Sellars later calls the token of a sentence *qua* "item in the world" a "natural-linguistic object." The passage suggests that *qua* items in the world, sentences stand in a mapping relation to other items in the world. The note also already indicates Wittgenstein as Sellars's source for the concept of picturing and hints at part of the criticism that Sellars will later direct at Wittgenstein's picture theory (see, e.g., TC, §51; also see BBK for a similar criticism of the Thomist tradition).

In RNWWR (§21), Sellars also considers the concept of an *ideal* map. However, he does so to account for our use of quantifiers, not to introduce ideas like his later concept of ideal adequacy. Sellars, who holds a substitutional view of quantification, claims that although our language does not contain enough singular terms to map all objects we recognize, it behaves as if it did.[42] Sellars's later concept of ideally adequate picturing would be misplaced in the early essays with their strong emphasis on immanence and pluralism (see Section 2.2).

After Sellars's early essays, the idea of a causal mapping relation between the world and language remained dormant for a decade before coming to full flower in the 1960s. At the beginning of the 1960s, Sellars published three essays, BBK (1960), TC, and NS (both 1962), that discuss picturing in detail.[43] In these essays, Sellars introduces picturing as a causal mapping relation that projects objects in the world, their properties, and relations into natural-linguistic objects, their properties, and relations.

However, these essays discuss picturing exclusively in its causal-tie role. They discuss picturing as a precondition for the meaningfulness of empirical languages and as a necessary condition for empirical truth (without yet drawing an explicit distinction between truth immanently and transcendently conceived). Sellars presents picturing as a process necessary for *any* language that is applied in the world. He does not even hint at the idea that different conceptual schemes might differ in their degree of pictorial adequacy.[44]

The idea of a regulative role for picturing first appears in Sellars's texts in the middle of the 1960s. Its occurrence is confined to a narrow interval from 1965 to 1968. In the 1965 essay SRI, Sellars claims that a scientific realist must hold that singular theoretical statements can picture theoretical entities in the world. This is the first tentative step toward a regulative role for picturing since it addresses whether theoretical scientific statements can picture at all. However, in SRI, Sellars does not yet explicitly attribute a higher degree of pictorial adequacy to theoretical statements compared to statements made in the "observation framework."

The first place where Sellars openly toys with the idea of a regulative role for picturing is in the short piece OAFP (probably written in 1965 but published only in 1988).[45] Sellars suggests that the end we pursue in theory change "is the direct ability to produce adequate conceptual pictures of relevant parts of our environment" (OAFP, §26). However, the notion of adequate conceptual pictures in OAFP is rather opaque. Sellars claims that the end of producing such pictures is accepted by "very few," and it remains open why anyone ought to accept it. In later essays (e.g., NDL), Sellars addresses such concerns by suggesting that our most general epistemic ends are necessary ends that any concept user and, thus, potential knower must accept. However, adequate picturing is no longer among such epistemic ends in these essays.

Importantly, Sellars considers adequate picturing as an "end-in-view" in OAFP and claims that ends-in view must be "the sort of thing that can be known to be realized" (OAFP, §33). Thus, it seems as if, in the middle of the 1960s, Sellars did consider pictorial adequacy as an accessible criterion for convergent conceptual change. This puts pressure on interpretations like Seiberth's, according to which Sellars did *not* consider pictorial adequacy epistemically accessible for us. But of course, it also puts pressure on my claim that we can reconstruct Sellars's views on ideal truth without appealing to picturing.

Sellars develops a regulative role for picturing in detail in the fifth chapter of SM. SM is the published version of Sellars's Locke Lectures from 1965/66. The fifth chapter of the book was not originally part of the Locke Lectures and is based on a further lecture Sellars gave in 1966 (see SM, Preface §2). It is unclear what material this lecture contained.[46] In any case, the published fifth chapter of SM presents us with a detailed account of picturing in its causal-tie and its regulative role.

I will not give a detailed exposition of Sellars's account of picturing in SM. Many important aspects have been outlined in Section 2.3. Besides discussing the causal-tie role of picturing and the concepts of pictorial correctness and pictorial adequacy, Sellars introduces the notions of conceptual counterparts or conceptual families as well as several principles based on them, which are meant to make judgments about truth and

picturing in one conceptual scheme applicable to other schemes. Section 4.1 will say a bit more about these ideas. Here, I want to focus on the broader outline of how the relative importance of the different roles of picturing evolves in Sellars's thinking.

Very importantly, the fifth chapter of SM is the *only* detailed discussion of picturing in its regulative role in Sellars's work. There are several publications after SM which discuss or at least mention picturing: TTC, MMM, NAO, MEV, and TTP. However, none contains any further discussions of picturing's regulative role or the concept of pictorial adequacy. Sellars does not even hint at the idea. Thus, a genuine concern on Sellars's part with a regulative role for picturing seems to be confined to the narrow interval between 1965 and 1968.

There is one potential exception in the fifth chapter of NAO, Sellars's Dewey Lectures from 1973/74:

> The tension between the concept of the world story as the world story which *is* in point of fact accepted and the concept of *the* world story as that which *ought to be* accepted is a genuine one, the exploration of which takes one to the central issues of epistemology. Can one speak of a *nisus* of the *is* of languaging toward the *ought* of languaging? […] Contingencies may block the road of inquiry, yet truth (adequacy of representation) abides as the *would be* of linguistic representation.
>
> (NAO, chap. V §65; Sellars's emphases)

Still, curiously almost, the footnote attached to the passage refers the reader to Jay Rosenberg (Rosenberg 1974, 1975) and not to Sellars's *Science and Metaphysics*. With its invocation of representational adequacy and a "would be" of linguistic representation, the passage itself can be read as echoing the idea of a regulative role for picturing. But Sellars is not explicit about this. The passage can also be read as merely concerning picturing's causal-tie role. On this level, too, we can distinguish how language users actually picture the world and how they ought to picture it, i.e., what a correct picture according to the rules of their language would be.

NAO is particularly interesting among Sellars's discussions of picturing after SM. Much like SM, this book is meant to synthesize larger parts of Sellars's thought system (NAO, preface). The book culminates in an elaborate discussion of picturing in its last chapter, and many preceding chapters prepare the ground for this discussion. Thus, much of the book is concerned with picturing, at least indirectly. Nevertheless, the idea of ideally adequate picturing is perspicuously absent.

Instead of building on the foundations laid in SM and its account of picturing, Sellars seems almost reluctant even to mention his 1968 account of picturing in NAO. Instead, he makes contact with his pre-1965 thought

about picturing and related concepts. For example, he reintroduces his idea of a world-story from his earliest essays and construes it as a precursor to the concept of a linguistic picture:

> I referred to the view, which I have held since my earliest publications that the representational features of an empirical language require the presence in the language of a schematic world story.
>
> (NAO, chap. V §59)

> Ostensibly, I have been preparing the way for an account of world stories which construes them, so to speak, as world-sized, if schematic, maps.
>
> (NAO, chap. V §69)

Sellars closes the book with a long passage from TC, his 1962 essay on picturing:

> This reference to constructing a map leads me back to the theme of constructing a world story. And after much cudgeling of the brain I can find no significantly better way of getting the point across than what I had to say on this topic in "Truth and 'Correspondence'."
>
> (NAO, chap. V §80)

Thus, regarding picturing, Sellars stresses the continuity between NAO and his thought predating *Science and Metaphysics*. In contrast, the fifth chapter of SM is not referenced once in NAO in relation to picturing. This is surprising. Sellars claimed in 1968 that the picturing chapter of SM was "a decisive step," "the heart" of his enterprise in that book (SM, Preface §2 and §8) and thus of his whole system at the time. The importance Sellars ascribed to the fifth chapter of SM in 1968 contrasts starkly with the absence of any mention of it in Sellars's next detailed treatment of picturing only some years later. Thus, as far as picturing is concerned, the image of continuity which Sellars communicates to his readers in NAO connects his early essays, the early 1960s, i.e., periods where he had merely introduced a causal-tie role for picturing, with his position in the 1970s. It circumvents *Science and Metaphysics* and its account of a regulative role for picturing.

Of course, there may be many reasons for this elision of SM with respect to picturing, e.g., the initial unenthusiastic reception of Sellars's Locke Lectures and their published version. However, my aim is merely to note that Sellars's writings after 1968 suggest that he might have changed his mind concerning the regulative role for picturing, whatever the explanation for this is.

Soon after the publication of SM, Sellars returns to the theme of explanation and explanatory coherence at points where he is concerned with the Peircean conceptual scheme or science's privileged position in ontology. In "Metaphysics and the Concept of a Person," published only shortly after SM, Sellars claims that

> [t]oday we are in a better position to distinguish between the conceptual framework of which nature was the cause, and the freely elaborate conceptual frameworks with which we now challenge nature. It is *the greater explanatory power* of the latter which stands behind the claim that things as they are in themselves are things as ideal science would find them to be. But the details of this neo-Peircean conception of truth and reality must be left to another occasion
>
> (MP, §61; my emphasis)

At the beginning of a roundtable discussion at Ohio State University in 1977, Sellars remarks that the scientific image is "described in terms of certain regulative ideals (not made explicit) as to what an explanatory framework should be" (WSNDL, 335). In the discussion of "adequacy of representation" in NAO mentioned above, Sellars speaks about the "ought-to-bes and ought-to-dos concerning explanatory coherence," which serve as rules for making linguistic rules (NAO, chap. V §64). In a brief remark at the end of MGEC, Sellars calls explanatory coherence the "ultimate criterion of truth" (MGEC, §89). These later occurrences of the explanatory theme are neither worked out well nor very explicit, but again, they contrast strikingly with the absence of that theme in SM. Explanatory coherence and ideally adequate picturing might thus be alternating themes in Sellars's thinking when it comes to the primary tools for defining the Peircean scheme, with ideally adequate picturing dominating only briefly.

We could also formulate a hypothesis as to why Sellars starts developing the idea of ideally adequate picturing in the creation process leading to SM. In 1966, Richard Bernstein published the first detailed critical examination of Sellars's system in a two-part essay. During his insightful discussion, Bernstein challenges Sellars, among other things, to defend the primacy of the scientific image over the manifest image in a non-trivial and non-question-begging way and to give a clear sense to the idea that theoretical scientific descriptions of the world are more adequate than commonsense descriptions:

> In explicating his version of scientific realism, Sellars has argued that, in principle, it would be possible to abandon an observation language or a common sense framework of physical objects and replace them by

> a more adequate scientific theory […] But such notions as "adequate" and "acceptable" are loaded. Adequate *for what* and acceptable *to whom*? What are the criteria or the guidelines for determining whether a proposed redefinition is acceptable? What kinds of reasons would count as good reasons here? If "adequate" simply means adequate for the purposes of scientific description and explanation, once again the primacy thesis is in danger of becoming trivial.
>
> (Bernstein 1966, 304)

In the preface to SM, Sellars writes that

> [the fifth chapter] adds, in my opinion, a decisive step to the series of attempts I have made over the past ten years to evaluate the comparative claims to reality of the "manifest" and "scientific" images of what there is.
>
> (SM, Preface §2)

This could be read as a response to Bernstein's challenge. The year 1966, in which Bernstein's essay was published, was the year when Sellars held the lecture that was to become the fifth chapter of SM. According to the records of the Pittsburgh Archive, there is an annotated copy of Bernstein's essay in Sellars's library. Bernstein's criticism might thus have had an impact on Sellars's introduction of a regulative role for picturing.

Regardless of whether this ultimately helps to explain why a regulative role for picturing appears quite suddenly in Sellars's thought after the middle of the 1960s, the discussion of this section suggests that we should not overrate the importance of the regulative role of picturing for Sellars's system as seen over time. This idea appears only fleetingly around the middle of the 1960s; Sellars returns to the theme of explanatory coherence afterward and does not develop, discuss, or even mention his 1968 concept of pictorial adequacy in subsequent publications. It is, of course, not completely clear that Sellars dropped the idea of a regulative role for picturing after 1968 since he never explicitly rejects his former claims. But the developments described here show that he at least refrained from openly endorsing it after SM. From a longitudinal perspective, the causal-tie role of picturing seems to have been more important to Sellars than the regulative role.[47]

Against what I have claimed, the passage from NAO cited above (NAO, chap. 5 §65) might suggest that there is, after all, an essential independent role for the concept of pictorial adequacy after SM, namely as a component in teleological explanations of conceptual development.[48] The idea would be that "adequacy of representation" acts as the final cause (the "would-be") of conceptual development, i.e., that we can explain

the process of conceptual development by understanding it as a process directed at a state of ultimately adequate representation, i.e., ultimately adequate picturing.

However, the relevant passages from NAO do not unequivocally support such a reading. In the paragraph before the one cited above, Sellars speaks about the meta-conceptual "ought-to-bes and ought-to-dos concerning explanatory coherence" (NAO, chap. 5 §64), which govern the more specific rules that govern the linguistic uniformities that create our linguistic pictures of the world. Thus, if pictorial adequacy plays a role in teleological explanations of conceptual change, this role would not be independent of the role played by an ideal of explanatory coherence for Sellars (for a discussion of this ideal, see Section 4.2). It is not in tension with the passage cited from NAO above to see these two roles as related in the way suggested in Section 3.1.

To see the role of an ideal of explanatory coherence as primary when it comes to teleological explanations of conceptual change makes sense for a further reason. Conceptual change is the development of normative practices. In SRLG (§§15–7), Sellars compares, for somewhat different purposes, teleological explanations in biology with teleological explanations concerning norm-governed practices. He writes that when a bee makes the moves of a bee dance, its moves occur in a specific way "because of the dance." That is, the aim of the moves, producing the whole dance, explains why the moves occur. Sellars claims that this kind of teleological explanation can be understood in terms of evolutionary theory. In normative practices, e.g., conceptual practices, the role of the evolutionary mechanism is fulfilled by trainers' shaping the behavior of learners to make it accord with the respective rules (see MFC). In these practices, it is norms that provide teleological explanations of the uniform behaviors that embody norm-governed practices.

This also applies to the meta-conceptual norm of explanatory coherence. As I will argue in the next chapter, this norm is something we always already grasp as concept users, at least implicitly. This contrasts with the ideal of ideally adequate picturing, which we cannot grasp independently from this meta-conceptual norm (as argued in this chapter). Thus, we could not use a concept of adequate representation in teleological explanations of conceptual development independently from our grasp of the meta-conceptual norms constitutive of our conceptual schemes.

To summarize, I agree with critics like Rorty and Rosenberg that the concept of adequate picturing seems to play no substantial role in an account of ideal truth.[49] However, in light of the discussion in this section, I suggest that we attribute no central role to the idea within Sellars's philosophy in the first place.

Notes

1 According to Misak (2004, 122–23), we do not find this specific notion of convergence in Peirce either.
2 According to the pessimistic meta-induction, we have no warrant for assuming that the success of current scientific theories is an indicator of their truth since many successful theories of the past have turned out to be false (Laudan 1981). For counterarguments to the pessimistic meta-induction and defenses of convergent realism, see, e.g., Psillos (1999), Boyd (1983), Leplin (1997), or Chakravartty (2007).
3 Rorty (1988) commends Rosenberg's claims. Nevertheless, there are differences between Rorty's and Rosenberg's positions. Rosenberg claims that what counts as a good justification for conceptual change is constrained in a way that guarantees convergence toward a limit, a claim Rorty rejects (Rorty 2000).
4 Rosenberg writes specifically about theory change. As explained in Section 2.1, I will not distinguish theory change from conceptual change more generally.
5 Rosenberg's example is a reconstruction of Newtonian physical theory in terms of Einstein's theory of relativity.
6 Provided, of course, that no non-epistemic obstacles arise, e.g., that rational inquirers do not go extinct.
7 I will argue in Section 4.1 that Sellars's notion of continuity in conceptual change is a context-dependent notion.
8 That is, we might want to ask for a justification for Steven Levine's claim that there is "a meta-induction to the effect that just as our conceptual framework is more adequate than past structures, future conceptual structures will be more adequate than ours" (Levine 2007, 263).
9 Also, as I will argue below against Seiberth, the appeal to our ability to explain and predict is ambiguous. It is ambiguous between an appeal to our ability to *simply* explain and predict (i.e., to infer) and an appeal to our ability to explain and predict *successfully*.
10 Seiberth sometimes overstates his case in this respect. He claims, for example, that the picturing relation "is never epistemically accessible from within linguistic practices" (Seiberth 2022, 147). But on this view, we could not say even for our own conceptual scheme what natural-linguistic objects picture what objects. This claim seems hardly defensible from a Sellarsian perspective. Picturing is a causal relation, so a relation within reach of scientific inquiry.
11 When Sellars does claim that the "this" component in an intuition refers to something, he claims that it refers to sensations (e.g., WSNDL, 257). Seiberth's approach would thus imply that what is ultimately real for Sellars are sensations. This does not accord with Sellars's actual claims about what is ultimately real.
12 For a related thought, see Hicks (2022, 540). Seiberth's considerations draw attention to questions about Sellars's relation to causal theories of reference. Sellars does not seem unsympathetic toward these theories in the 1970s when they first visibly entered the philosophical scene (see RDP and some sympathetic remarks in NAO). It might be fruitful to ask whether Sellars wanted to assimilate picturing to causal theories of reference at these later stages of his career.

13 I do not claim that this list is exhaustive. Nevertheless, it reflects the possibilities discussed in the literature.
14 This option is also advocated by Seibt (1990; 2009, 266).
15 A similar line of reasoning would apply if we tried to appeal to Sellars's semantic externalism. Sellars signals cautious sympathy with the idea that terms like "gold" refer to "what gold really is" (RDP). Ideally adequate picturing could then be understood as picturing "what things really are." However, as Matsui (2021) argues, Sellars's semantic externalism is an "ideal successor externalism." The phrase "what gold really is" must be understood in terms of how gold would be conceived in an ideal successor conceptual scheme—the Peircean scheme. The concept of a Peircean scheme would thus be presupposed by this suggestion as well.
16 This might be in tension with Seiberth's insistence that we cannot establish degrees of pictorial adequacy from within our conceptual schemes.
17 From Sellars's perspective, we could interpret "successful living" as a form of *collective* successful living. Collective successful living would be defined by what is needed to foster the common welfare of all of "us" in the most encompassing sense, i.e., all rational beings. While Seibt connects her discussion to these ideas, Seiberth does not explore this path. I will turn to this and related ideas in Section 3.2.
18 The case of assertion exhibits a similar ambiguity. To successfully assert something can either mean to make a true assertion or to have successfully realized the speech act of assertion, regardless of whether the assertion is true. The difference is between realizing a speech act and also meeting the conditions of satisfaction of that speech act.
19 There are other problems with the idea of ideally adequate picturing, which I do not want to discuss here. For instance, Sellars assumes that at the ideal end of inquiry, we picture single theoretical scientific entities, probably microphysical entities of some type. But whether and how this is possible is not *prima facie* clear (see, e.g., his discussion in SM, chap. VI sec. VIII).
20 There is a further account in the literature on what the concept of ideally adequate picturing is meant to do (e.g., Stovall 2022, chap. 1). According to it, Sellars's motivation in the fifth chapter of SM is to show how we can use the notion of an ideal end of inquiry to say that even our here-and-now empirical statements capture the ultimate truth about the world to some extent. I think this reading captures Sellars's intentions well. However, it does not make clear how we should understand the notion of ideal truth or ideally adequate picturing.
21 Other commentators also note this theme, e.g., deVries (2020, 246) or Koons and Sachs (2022).
22 See also (OAFP, §18; Sellars's emphasis): "[w]e accept the first principles of a theory because we accept the theory; and we accept the theory because of what it enables us to *do*."
23 Sellars's theory of action centers around intentions. Therefore, I will speak of efficient agency here as the successful realization of intentions.
24 Cf. Seibt (2016, 211–13).
25 In what follows, I will presuppose that the agents we consider are rational, i.e., that they do not hold inconsistent intentions, that they choose the best

available means toward an end, etc. For Peirceans, rationality of this type can be presupposed.

26 The state of the world is important. Whether it is possible for me to realize my intention to read Goethe's *Faust* depends not only on the laws of nature and facts about me, but also on whether there still exist copies of Goethe's *Faust* at the time of my intending.

27 This neutralizes a possible objection to our first characterization of ideally efficient agency. Someone might claim that we cannot intend impossible things in the first place (so that we cannot even have, e.g., the intention to jump to the moon). Sellars agrees with this claim (see TA), even though other authors do not (for a brief discussion and some experimental results concerning folk psychology, see Buckwalter, Rose, and Turri [2021]). Even should the claim be true, however, this would merely mean that scientific inquiry ultimately tells us what we can intend.

28 For the distinction between material and formal mode of speech, see Carnap (2002, §79). Sellars frequently employs the distinction himself.

29 See Christias (2023, 137) for an emphasis on how changes to our conceptual schemes change the "very *space* of physical necessities, possibilities and impossibilities" (Christias's emphasis).

30 What about the suggestion that ideally efficient agency is the ability to realize *any* jointly possible set of ultimately physically possible actions? Besides still covertly presupposing the concept of an ideal end of inquiry, this idea takes away much of the attractiveness of the concept of practical success for understanding ideal truth. The concept was attractive because our grasp of successful action and the related assessment of the respective conceptual scheme seem so very direct. But we cannot assess in this purportedly direct way to what extent we are able to realize any jointly realizable set of ultimately physically possible actions.

31 Christias also offers ideas pointing in this direction. He describes Sellars's ideal end of inquiry as "the point in which there is no discrepancy between our determinate conception of what persons ought to be and our determinate conception of what persons 'really are'" (Christias 2023, 193). However, he probably would not want to *define* the concept of an ideal end of inquiry in these terms.

32 Sellars sometimes formulates the principle as a biconditional (TA, 111; SM, chap. VII §13) and sometimes as a simple conditional (IV, §25; TA, 111; ORAV, §47). In ORAV (n. 8), he claims that he uses the conditional merely to avoid certain confusions but could have used a biconditional instead (also see a letter by Sellars to Bruce Aune: CSBA, 30 April 1979).

33 Sellars does not want to claim that because there is this inference principle, someone who intends to strike a match also necessarily intends to light it. Rather, his claim concerns the coherence of our intentions. It says that someone who intends to strike a match but also intends not to light the match intends incoherently.

34 For more textual evidence on the role of science in determining what actions are categorically reasonable, see OMP; LLVI (§98 ff.).

35 DeVries is not alone in this. See, for example, Sicha (2014, §6).

36 Even if S-IMP is formulated as a simple conditional, we could raise problems. If we could definitively establish the categorial reasonableness of an intention like "Shall be [*p*]" before the ideal end of inquiry and if we accept Sellars's claim that ultimately only one coherent set of reasonable intentions can be derived from "We shall foster our common welfare," science could not raise doubts about the inference principle "'We foster our common welfare' implies '*p*'." (both "'We foster our common welfare' does not imply '*p*'" and "'We foster our common welfare' implies '¬*p*'" would lead, via S-IMP understood as a conditional, to an inconsistency in our inference principles or in our intentions). This would clash with EPM (§38).

37 Except the overarching intention "We shall foster our common welfare," and perhaps a further overarching intention that defines a practical personal point of view for Sellars, i.e., "I shall live a satisfying life." There are similar grounding principles in the empirical domain for Sellars, e.g., the principle that our perceptual reports are likely to be true (see MGEC; SK).

38 Picturing is also meant to delineate the domain of the descriptive or empirical in a narrow sense contrasting, e.g., with the domain of the normative. Furthermore, picturing plays an important role in Sellars's defense of scientific realism. Sellars claims that a scientific realist is committed to the idea that singular theoretical statements picture (SM, chap. VI §55–7). Both claims are controversial, but since they are independent from Sellars's concept of ideally adequate picturing, I will not discuss them.

39 Thanks to Willem deVries for suggesting the term.

40 The latter focus has recently been emphasized by Carl Sachs (e.g., Sachs 2019, 2022). I do not want to suggest that the transcendental viewpoint and the cognitive-science viewpoint are incompatible, but only that Sellars tended to emphasize the latter aspect more in his later thought.

41 See, e.g., (NAO, chap. 1 §26–27; chap. 2 §53; Index under "Reference"; the idea of "psycho-sociological-historical connections" between singular terms and their referents, e.g., WSNDL, 322; TTP, §158).

42 Sellars links these considerations about an ideal language with a complete set of logical constants to picturing in his correspondence with Gilbert Harman (CSGH, 26 February 1970).

43 There is also a brief remark on picturing in the 1964 essay "Notes on Intentionality" (NI, §29 ff.).

44 Sellars does say in BBK (§§39–40) that his picturing robot generates an increasingly "adequate" and complete map of its environment. But this is not his later concept of pictorial adequacy. Pictorial adequacy in Sellars's later sense is increased by changes in the projection method, and this his robot cannot do (safe for basic inductive moves tracking observational regularities which make the projection method more effective but do not substantially change it). When Sellars speaks of adequacy in BBK, he seems to mean the correctness and completeness of the robot's map.

45 Someone might suggest that the regulative role of picturing already announces itself in Sellars's ideal of "pure description" in CDCM in 1958. However, while ideally adequate picturing would certainly be one way of realizing this ideal, the idea of a pure description does not necessarily presuppose the notion

of *ideally adequate* picturing. The ideal merely states that the world can be exhaustively described without using, e.g., mental or normative discourse.

46 The Pittsburgh Archive of Sellars's papers holds a draft of a lecture given in London, probably the lecture in question (LL). The date stated in the lecture (23rd May) coincides with the date Sellars gives in the Preface to SM (the archive states "1976" as the relevant year, but it states this wrong year for every draft related to SM). The lecture draft consists merely of hand-written notes, and as far as I can judge, the topic of ideal truth is discussed only briefly toward the end of these notes. If this is the right and only draft of the relevant lecture, the bulk of the discussion of ideal truth in SM was probably conceived only after the lecture.

47 Some authors (e.g., Seiberth 2022) connect the regulative role of picturing and Sellars's notion of isomorphism, which appears in several of his writings, especially his early 1960s essays. However, the concept of isomorphism does not seem directly related to a regulative role for picturing in Sellars's thought. He does not apply the notion of isomorphism in his discussion of ideally adequate picturing but uses the idea in the early 1960s to characterize the causal-tie role of picturing. The occurrence of the notion of isomorphism before 1965 is no evidence that Sellars conceived of a regulative role for picturing before the middle of the 1960s.

48 Thanks to a reviewer for Routledge for bringing up this idea.

49 The concept may still be fruitful in its causal-tie application. Whether it is so is a controversial question which is, however, tangential to my concerns here (but see, e.g., Williams 2016; McDowell 2009, chap. 13).

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I cite Sellars's texts using the abbreviations that have become a standard device within Sellars scholarship. In the few cases where no established abbreviation exists, I introduce one.

Where possible, I refer to places in Sellars's texts by using paragraph numbers. In some cases, these paragraph numbers do not appear in the original published version of the respective text but were added only later, often in the collections of Sellars's writings issued by Ridgeview. Nevertheless, this numbering system has become a standard tool for citing Sellars's texts. Information about the relevant collection of Sellars's texts can be found in this list. EPM is cited using the original paragraph numbers.

AAE "Actions and Events." *Noûs* 7 (2): 179–202. DOI: 10.2307/2214491. 1973.

AE "Abstract Entities." *Review of Metaphysics* 16 (4): 627–71. 1963.

BBK "Being and Being Known." *Proceedings of the American Catholic Philosophical Association* 34: 28–49. DOI: 10.5840/acpaproc19603413. 1960.

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CC "Conceptual Change." In *Conceptual Change*, edited by Patrick Maynard and Glenn Pearce, 77–93. Dordrecht: D. Reidel. 1973.

CDCM "Counterfactuals, Dispositions, and the Causal Modalities." In *Minnesota Studies in the Philosophy of Science, Vol. II*, edited by Herbert Feigl Michael Scriven and Grover Maxwell, 225–308. Minneapolis: University of Minnesota Press. 1958.

CDI "Reflections on Contrary to Duty Imperatives." *Noûs* 1 (4): 303–44. DOI: 10.2307/2214622. 1967.

CIL "Concepts as Involving Laws and Inconceivable without Them." *Philosophy of Science* 15 (4): 287–315. 1948. Paragraph numbering cited according to reprint in PPPW, 86–114.

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EAE "Empiricism and Abstract Entities." In *The Philosophy of Rudolf Carnap*, edited by Paul A. Schilpp, 431–68. La Salle, IL: Open Court. 1963.

ENWW "Epistemology and the New Way of Words." *Journal of Philosophy* 44 (24): 645–60. DOI: 10.2307/2019792. 1947. Paragraph numbering cited according to reprint in PPPW, 28–40.

EPM "Empiricism and the Philosophy of Mind." In *Minnesota Studies in the Philosophy of Science*, edited by Herbert Feigl and Michael Scriven, 1: 253–329. Minneapolis: University of Minnesota Press. 1956.

FMPP "Foundations for a Metaphysics of Pure Process." *The Monist* 64 (1): 3–90. 1981.

GE "Grammar and Existence." *Mind* 69 (276): 499–533. 1960.

IILO "Imperatives, Intentions, and the Logic of 'Ought.'" In *Morality and the Language of Conduct*, edited by Hector-Neri Castaneda and George Nakhnikian, 159–214. Detroit: Wayne State University Press. 1963.

IKTE "The Role of Imagination in Kant's Theory of Experience." In *Categories: A Colloquium*, edited by Henry W. Johnstone, Jr., 231–45. Pennsylvania: Pennsylvania State University. 1978.

IM "Inference and Meaning." *Mind* 62 (247): 313–38. 1953.

ITSA "Is There a Synthetic a Priori?" *Philosophy of Science* 20 (2): 121–38. 1953. Paragraph numbering cited according to reprint in SPR, 298–320.

IV "Induction as Vindication." *Philosophy of Science* 31 (3): 197–231. 1964.

KPT *Kant and Pre-Kantian Themes: Lectures by Wilfrid Sellars*, edited by Pedro Amaral. Atascadero: Ridgeview. 2002.

KTE "Some Remarks on Kant's Theory of Experience." *Journal of Philosophy* 64 (20): 633–47. DOI: 10.2307/2024460. 1967. Paragraph numbering cited according to reprint in KTM, 269–82.

KTI "Kant's Transcendental Idealism." *Collections of Philosophy* 6: 165–81. 1976. Paragraph numbering cited according to reprint in KTM, 403–17.

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MEV "Mental Events." *Philosophical Studies* 39 (4): 325–45. DOI: 10.1007/BF00360342. 1981.

MFC "Meaning as Functional Classification – A Perspective on the Relation of Syntax to Semantics." *Synthese* 27 (3/4): 417–37. DOI: 10.1007/BF00484606. 1974.

MGEC "More on Givenness and Explanatory Coherence." In *Justification and Knowledge*, edited by George Pappas, 169–82. Dordrecht: D. Reidel. 1979.

ML "Meditations Leibnitziennes." *American Philosophical Quarterly* 2 (2): 105–18. 1965.

MMM "Hochberg on Mapping, Meaning, and Metaphysics." In *Midwest Studies in Philosophy II*, edited by Peter French, Theodore Vehling, Jr., and Howard Wettstein, 214–24. Minneapolis: University of Minnesota Press. 1977.

MP "Metaphysics and the Concept of a Person." In *The Logical Way of Doing Things*, edited by Karel Lambert, 219–52. New Haven: Yale University Press. 1969. Paragraph numbering cited according to reprint in KTM, 283–307.

NAO *Naturalism and Ontology*. Atascadero: Ridgeview. 1980.

NDL "Are There Non-Deductive Logics." In *Essays in Honor of Carl G. Hempel*, edited by Nicholas Rescher, 83–103. Dordrecht: D. Reidel. 1970.

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P "Particulars." *Philosophy and Phenomenological Research* 13 (2): 184–99. DOI: 10.2307/2103871. 1952. Paragraph numbering cited according to reprint in SPR, 282–97.

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PPE "Pure Pragmatics and Epistemology." *Philosophy of Science* 14 (3): 181–202. 1947. Paragraph numbering cited according to reprint in PPPW, 4–25.

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